

Work Order ID 133910***133910***

Page 1

Item ID: D6201

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: "T" Extrusion

Start Date: 6/23/15

Start Qty: 20.00

20

Cust Item ID:

Required Date: 6/23/15

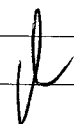
Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: 

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D6201

Rev A

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 28957

a)Description: T-beam extrusion

b) 4.00" x 4.00" x 0.375"

c) Minimum Ultimate Tensile Strength = 38ksi

d) Minimum Yield Tensile strength = 35ksi

e) Material: 6061-T6/T6511 (QQ-A-200/8)

f)Material certification required

***EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE
SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH
AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS,
OR DENTS.***

MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE

CY JUN 26 2015 20

Work Order ID 133910***133910***

Page 2

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Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: "T" Extrusion

Start Date: 6/23/15 Start Qty: 20.00

20

Cust Item ID:

Required Date: 6/23/15 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.00							
Packaging	Ensure material certification is attached								
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control	Ensure Material certification comply to Dwg D6104								DAS 14 9-89 15/07/10
130	Identify as per dwg & Stock Location: MAT 28	0.00							
130									
Packaging	Memo	0.00							
Packaging	LOCATION: MAT028								DAS 14 9-89 15/07/10

Work Order ID 133910***133910***

Page 3

Item ID: D6201

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: "T" Extrusion

Start Date: 6/23/15 Start Qty: 20.00

20

Cust Item ID:

Required Date: 6/23/15 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140 QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MLJ JUL 13 2015

MLJ JUL 13 2015

Picklist Print

June-24-15 12:57:18 PM

Page 1

Work Order ID: 133910

133910

Parent Item: D6201

D6201

Parent Item Name: "T" Extrusion

Start Date: 6/23/15

Required Date: 6/23/15

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP A: 01.05.15New Issue EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D6201P

Purchased

No

110

f

0.0000

1

20

D6201P

**

T Extrusion 4X4X3/8

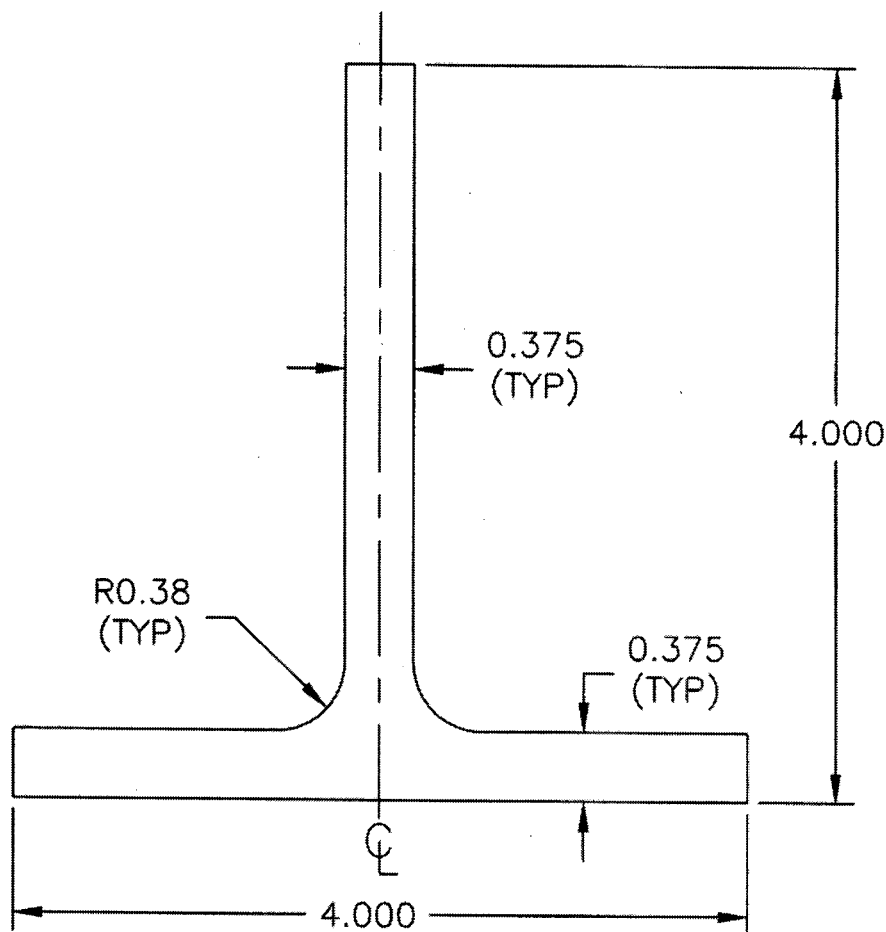
20 F SP 15-06-30



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D6201	REV. A SHEET 1 OF 1
DATE 01.04.10		TITLE T-BEAM EXTRUSION	SCALE 1:1
A	01.04.10	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23 *[Signature]*



D6201-XXX T-BEAM EXTRUSION
WHERE XXX IS LENGTH IN INCHES

EG:
D6201-027 IS 27 INCHES LONG

PURCHASE MATERIAL: ALUMINUM "T"-EXTRUSION ROUND FILLET
4.000" x 4.000" x 0.375"
6061-T6/T6511 (QQ-A-200/8)
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM YIELD TENSILE STRENGTH = 35 ksi

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
No. 133910-ML5
1506-24

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Chantal Lavoie

From: Jean-Luc Menard
Sent: Thursday, June 25, 2015 2:13 PM
To: Chantal Lavoie
Cc: William Monterroza
Subject: FW: Extrusions

Hi Chantal,
See below,
JL

From: William Monterroza
Sent: June-25-15 2:10 PM
To: Jean-Luc Menard
Cc: Chris Provencal
Subject: Extrusions

JL,

Engineering will update the drawing to match the supplier's. Go ahead and order as needed. Until they are changed, if an inspection is done and found to be out of spec to current drawing, engineering will sign off on it.

Thanks.

Will Monterroza, P. Eng., M. Sc., MBA
Director of Engineering

DART AEROSPACE
T 1 613 632-5200 > 250
M 1 613 677-9898
S dart-wmonterroza

www.dartaerospace.com





Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28957**

Purchase Order Date 6/26/2015 8:35:39 AM

PO Print Date 6/26/2015

Page Number 1 of 2

Order From :

VC-CAM002

CAMPI STEEL
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 800 667 4248

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D6201P	T Extrusion 4X4X3/8	7/2/2015 Yes 7/2/2015		20.00 f	\$20.50	\$410.00

AS PER DWG D6201 REV. A
B133910
T-BEAM EXTRUSION 4" X 4" X 0.375"
MATERIAL: 6061-T6 AS PER QQ-A-200/8

SPS de 30

Line Total:

\$410.00

2	71401-45	PROCUREMENT QUALITY CLAUSES	7/2/2015 No 7/2/2015		1.00	\$0.00	\$0.00
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Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

Note:

6/26/2015



935, boul. du Havre
Valleyfield, Québec
J6S 5L1

Valleyfield

Tél.: 450 377-4248

Fax : 450 377-5696

Montréal

Tél.: 514 336-4248

Fax : 514 336-4246

Ontario

Tél.: 1 800 667-4248

Fax : 1 866 456-4242

DISTRIBUTEUR D'ACIER ET DE MÉTAUX SPÉCIALISÉS
STEEL AND SPECIALTY METALS DISTRIBUTOR

www.aciercampi.com

VENDU À / SOLD TO :

613-632-5200

613-632-1053

EXPÉDIEZ À / SHIP TO :

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY,
ONTARIO
K6A 1K7

EQUIP: LIFT

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY,
ONTARIO
K6A 1K7

COMMANDE

ORDER

N°

250209

DATE

26/06/15

BON DE LIVRAISON

PACKING SLIP

N°

DATE DE LIVRAISON

DELIVERY DATE

30/06/15

VOTRE N° DE COMMANDE / YOUR P.O. N°	VEND./SALES M.	CODE CLIENT / CUST. CODE	EXPÉDIER PAR / SHIP VIA	TERMES / TERMS	TERR.	REMARQUES / REMARKS	PAGE N°
P028957	V	DAER	12345	NET 30 JOURS	2R		001

CODE DE PRODUIT PRODUCT CODE	COMMANDE ORDERED	EXPÉDIE SHIPPED	DESCRIPTION	POIDS WEIGHT	PRIX PRICE	PAR PER *	MONTANT AMOUNT
	1		"T" ALU 6061T6 4" X 4" X 3/8 1 X 20' HEAT 852178	Contrôle Qualité 1.00 Sorte de matériel ☐ Dimension ☐ Longueur ☐ Quantité ☐ Tolérance ☐ Éléments divers ☐ Inspecté par: ☐			

* Unités de mesure : CLB Cent (100) livres / Units of measure : CPH Cent (100) pounds / UN Unit / PI Pieds / PC Pied carré / Square foot

CONDITIONS :

LES MATÉRIAUX LIVRÉS ET FACTURÉS SELS QUE DÉCRITS DEMEURENT LA PROPRIÉTÉ DE «ACIER CAMP I INC.» JUSQU'À PARFAIT PAIEMENT COMPLET ENCAISSÉ. • LES RISQUES DE Perte DU BIEN SONT À LA CHARGE DE L'ACHETEUR. • LA GARANTIE DE QUALITÉ DU MATÉRIEL EST LA MÊME QUE CELLE DU FABRICANT. • L'ACHETEUR S'ENGAGE À RESPECTER LES CONDITIONS SUIVANTES : NET 30 JOURS DE LA DATE DE FACTURATION, ET TOUT COMPTES IMPAYÉ DANS LES 30 JOURS ENTRAÎNE DES FRAIS DE 2% PAR MOIS (24% PAR ANNÉE) JUSQU'À ACCEPTÉ DE PAYER. • TOUT DÉFAUT D'EXÉCUTION D'UNE OU L'AUTRE DES OBLIGATIONS EN VERTU DU PRÉSENT CONTRAT ENTRAÎNE LA DÉCHÉANCE DU TERME ET PERMET AU VENDEUR, À SON CHOIX, DE RÉCLAMER TOUT SOLDE DU PRIX DE VENTE OU REPRISE LE BIEN VENDU. • TOUTE RÉCLAMATION DOIT ÊTRE FAITE DANS LES CINQ JOURS SUR PRÉSENTATION DE CE DOCUMENT. • TOUTE MARCHANDISE ENDOMMAGÉE, ALTÉRÉE OU COUPÉE NE PEUT ÊTRE REPRISE. • AUCUN RETOUR DE MARCHANDISE NE SERA ACCEPTÉ SANS NOTRE AUTORISATION. • TOUTE MARCHANDISE RETOURNÉE EST SUJETTIE À DES FRAIS DE MANUTENTION DE 25%.

CONDITIONS :

ALL SOLD AND DELIVERED MATERIALS REMAIN THE PROPERTY OF "ACIER CAMP I INC." UNTIL PAYMENT IS MADE FULL, COMPLETE AND CASHED. • ALL LOST MATERIALS ARE AT THE BUYER'S EXPENSE. • ALL MATERIALS BEAR THE SAME WARRANTY AS GIVEN BY THE MANUFACTURER. • THE BUYER HEREBY ACCEPTS TO RESPECT THE FOLLOWING CONDITIONS: NET 30 DAYS FROM BILLING DATE AND THE BUYER ACCEPTS TO PAY ADMINISTRATION CHARGES OF 2% PER MONTH OR 24% PER ANNUM ON ALL PAST DUE ACCOUNTS OVER 30 DAYS. • ANY DEFAULT IN RESPECT WITH THIS CONTRACT WILL LEAD TO PAYMENT BY ACCELERATION AND PERMITS TO THE SELLER, AT HIS CHOICE TO CLAIM FOR THE BALANCE DUE OR THE REPOSSESSION OF THE GOODS SOLD. • ANY CLAIM MUST BE MADE WITHIN FIVE DAYS WITH THIS DOCUMENT ENCLOSED. • ANY MERCHANDISE THAT HAS BEEN DAMAGED, CUT OR MODIFIED CANNOT BE RETURNED. • ALL GOODS RETURNED MUST BE WITH OUR AUTHORIZATION AND ARE SUBJECT TO A 25% RESTOCKING CHARGE.

SOUS-TOTAL
SUB TOTAL

T.P.S.
G.S.T.

T.V.Q. / T.V.H.
G.S.T. / H.S.T.

TOTAL

PRÉPARÉ PAR / PREPARED BY :

VÉRIFIÉ PAR / VERIFIED BY :

LIVRÉ PAR / DELIVERED BY :

HEURE / TIME :

MARCHANDISE REÇUE EN BONNE CONDITION / MERCHANDISE RECEIVED IN GOOD CONDITION

X

A/Y M/M J/D

N° ENR. TPS / GST REG. N° 822 435 970 RT 0001 • N° ENR. TVQ / QST REG. N° 122 127 8280 TQ 0001

SIGNATURE DU CLIENT / CUSTOMER'S SIGNATURE

DATE

SCRIPTO-1971

C129820



SIGNATURE ALUMINUM CANADA
1850 CLEMENTS RD
PICKERING, ON L1W 3R8

CERTIFICATE OF COMPLIANCE

05/31/2015	5357009	118419	1
PO37555	U20743	852188	05/31/15

002		C-031522-10	240" MILL 6051 T6511	3/8X4X4" TEE ALUMINUM
774 LBS				
752 LBS		11 PCS	1 PKGS	
ASTM B221-08				

Mechanical Tests:

<u>Tensile</u>	<u>Yield</u>	<u>% Elongation</u>	<u>Conductivity</u>	<u>HRE</u>
MPA / KSI	MPA / KSI			
334.5 / 48.5	304.2 / 44.1	15.4	N/A	92

DAS
14 1507/10
9-89

Chemical Analysis:

<u>Si</u>	<u>Fe</u>	<u>Cu</u>	<u>Mn</u>	<u>Mg</u>	<u>Cr</u>	<u>Zn</u>	<u>Ti</u>	<u>V</u>	<u>Zr</u>
0.60	0.24	0.19	0.08	0.87	0.06	0.06	0.02	0.01	0.00

This Material is Made in Canada

This Material is RoHS Compliant

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Mazzotta
Director of Quality
Signature Aluminum Canada Inc

ISO 9001/TS16949 Registered Company

Visit us at www.signaturealuminum.com



44 X 4 X 3/8
1507/10
2015
T6

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D6201
DATE: 15/07/10

PO / BATCH NO.: 28957/133910

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 20
QUANTITY INSPECTED: 20
QUANTITY REJECTED: _____

THICKNESS ORDERED: 4.00X4.00X.375
THICKNESS RECEIVED: 4.00X4.00X.375
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	☒	
CORRECT FINISH	☒	N	
CORROSION	Y	☒	
CORRECT GRAIN DIRECTION	☒	N	
CORRECT MATERIAL	☒	N	
CORRECT THICKNESS	☒	N	
PHOTO REQUIRED	Y	☒	
CORRECT MATERIAL	☒	N	
CORRECT REF # TO LINK CERT	☒	N	
CORRECT MATERIAL IDENTIFICATION	☒	N	
CORRECT M# ON THE MATERIAL	☒	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	☒	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	☒	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>14</u> <u>9-89</u>	SIGNED OFF BY: _____		
DATE: <u>15/07/10</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

INSTRUCTIONS FOR INSPECTING BAR, TUBING, ROUND, & SHEET STOCK

- 1- VERIFY STOCK TO DART PURCHASE ORDER
- 2- MEASURE ALL DIMENSIONS FOR EACH PURCHASED STOCK
 - a. WIDTH, THICKNESS, DIAMETER, WALL THICKNESS & LENGTH
- 3- VERIFY CONDITION OF MATERIAL i.e. DAMAGED, CORRODED, etc.
- 4- VERIFY THAT SUPPLIER HAS A NUMBER (HEAT #) ON ITS RECEIVING REPORT TO LINK TO MATERIAL CERTS
- 5- VERIFY MATERIAL CERTS ARE CORRECT TO THE DART PO INSTRUCTIONS
- 6- REMOVE / CUT A PIECE OF MATERIAL FOR SAMPLE HARDNESS TESTING

INSTRUCTIONS FOR INSPECTING SKIDTUBE & STEP EXTRUSION

- 1- VERIFY TO DART SUPPLIED DRAWING
- 2- SAMPLE INSPECT MATERIAL IN BUNDLE TO ENSURE MATERIAL CAN BE RECEIVED INTO DART
- 3- USING PORTABLE HARDNESS TESTER VERIFY HARDNESS OF THE MATERIAL TO THE DRAWING
- 4- VERIFY THAT MATERIAL CERTS MATCH TO WHATS CALLED UP ON THE DART DRAWING

AFTER MATERIAL PASSES INSPECTION

- 5- HAVE DART EMPLOYEES START STOCKING MATERIAL BUT REQUEST MIN 20pcs FOR FULL INSPECTION
- 6- INSPECT ALL DIMS AS PER DRAWING REQUIREMENTS

INSTRUCTIONS FOR INSPECTING CROSS TUBE MATERIAL

- 1- VERIFY MATERIAL CERTS MATCH THE REQUIREMENTS ON THE DART DRAWINGS
- 2- INSPECT MIN. HALF THE BATCH OF EXTRUSION RECEIVED INTO DART
- 3- INSPECT MATERIAL AS PER THE EXTRUSION REPORT
 - a. WALL THICKNESS USING ULTRA-SONIC IN 4 LOCATIONS
 - b. OUTSIDE DIAMETER HIGHEST/LOWEST BOTH ENDS
 - c. INSIDE DIAMETER HIGHEST/LOWEST BOTH ENDS
 - d. STRAIGHTNESS @ CENTER OVER 12" SPAN
 - e. WALL THICKNESS USING TUBE MICROMETER HIGHEST/LOWEST BOTH ENDS
- 4- IDENTIFY EACH TUBE IN SEQUENCE OF INSPECTING (TUBE 1, TUBE2.....) AND W/O# AND PO#
- 5- RECORD ALL FINDINGS ON EXTRUSION REPORT

IF ANY QUESTIONS PLEASE SEE QC COORDINATOR BEFORE GOING FURTHER